

What is claimed is:

1. A method of separating cells in a centrifuge comprising:  
providing a cell suspension in a processing bag;  
separating the cells into a fraction enriched with specific cells by centrifugation in a  
centrifuge;  
transferring the enriched fraction to a storage bag via an outlet tube;  
adapting said outlet tube in a position having a radially inwardly directed flow and having a  
valve associated therewith;  
whereby said step of transferring said enriched fraction through said outlet tube occurs upon  
activation of said valve into open position.
2. A method according to Claim 1 in which said activation of said valve into open position  
occurs during centrifugation.
3. A method according to Claim 1 in which said cell suspension includes a buffy coat and  
said enriched fraction is a light-weight fraction enriched with platelets.
4. A method according to Claim 1 in which the transferring of said enriched fraction  
through a first radially positioned portion of said outlet tube having a radially inwardly directed  
flow includes diverting said radial flow into a peripheral flow via a cell trap having an enlarged  
section for maintaining specific cells.
5. A method according to Claim 1 in which the transferring of said enriched fraction  
through said outlet tube includes transferring through at least one enlargement formed in said outlet  
tube for separation of more dense cells.
6. A method according to Claim 1 in which the transferring of said enriched fraction  
through a first radially positioned portion of said outlet tube having a radially inwardly directed

flow includes flowing through said valve and through a second radially positioned portion of said tube having a radially outwardly directed flow.

7. A method according to Claim 1 in which said cells are platelets or stem cells.
8. A method according to Claim 1 in which said cells are red blood cells.
9. A method according to Claim 1 in which said valve is a manually activatable clamp.
10. A method according to Claim 1 in which said valve is a magnetically activatable valve.
11. A method according to Claim 1 in which said valve is an electromagnetically activatable valve.
12. A bag assembly for separation of cells in a centrifuge comprising:  
a processing bag intended to contain a cell suspension and to be placed in a centrifuge for separating the cells into a fraction enriched with specific cells by centrifugation;  
a storage bag; and  
an outlet tube for transferring said enriched fraction to the storage bag;  
whereby said outlet tube is adapted to be placed in a position having a radially inwardly directed flow and adapted to be engaged by a clamping member on said centrifuge which provides for transferring said enriched fraction through said outlet tube upon activation of said valve to open position.
13. A bag assembly according to Claim 12 in which said outlet tube is adapted to be engaged by said valve and activated into open position during centrifugation.
14. A bag assembly according to Claim 12 in which said outlet tube comprises a chamber forming an enlargement at the outlet tube.

15. A bag assembly according to Claim 12 in which said outlet tube is provided with spaces having stagnant flow.

16. A bag assembly according to Claim 12 in which said cells are platelets or stem cells.

17. A bag assembly according to Claim 12 in which said cells are red blood cells.

18. A bag assembly according to Claim 12 in which said clamping member is a manually activatable clamp.

19. A bag assembly according to Claim 12 in which said clamping member is a magnetically activatable valve.

20. A system for separation of cells comprising:

a centrifuge device; and

a bag assembly which is adapted to be disposed in said centrifuge, said bag assembly including:

a processing bag intended to contain a cell suspension and to be placed in a centrifuge for separating the cells into a fraction enriched with specific cells by centrifugation;

a storage bag; and

an outlet tube for transferring said enriched fraction to the storage bag;

whereby said outlet tube is adapted to be placed in a position having a radially inwardly directed flow and adapted to be engaged by a clamping member on said centrifuge which provides for transferring said enriched fraction through said outlet tube upon activation of said valve to open position.